

Date: Thursday, 4/12/2007 9:32:58 AM
 User: Kim Johnston

Process Sheet

Customer	CU-DAR001 Dart Helicopters Services		Drawing Name	TUBE	
Job Number	31776		Part Number	41232 200 002 001	
Estimate Number	12773		Drawing Number	41232-200-002 REV A	
P.O. Number	N/A		Project Number	N/A	
This Issue	4/12/2007	S.O. No.	Type	MACHINED PARTS	
Prsht Rev.	NC		Drawing Revision	A	
First Issue	N/A		Material	N/A	
Previous Run	31019		Due Date	5/10/2007	
Written By			Qty:	8	
Checked & Approved By	JLM		Um:	Each	
Comment	Est Rev:A New Issue 07-03-05 JLM				

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description:
1.0	M2024T3H1375	2024-T3 Hex Bar 1.375"
		
Comment: Qty.: 0.4550 f(s)/Unit Total : 3.6397 f(s) 2024-T3 Hex Bar 1.375" Batch: 103753 MS 07/04/25		
2.0	LATHE CONV.	CONVENTIONAL LATHE
		
Comment: CONVENTIONAL LATHE Turn as per Dwg 41232-200-0021 DSP 07/04/28 3/28/MS 07/04/25 8		
3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
		
Comment: INSPECT PARTS AS THEY COME OFF MACHINE JL 07/04/28 8		
4.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
		
Comment: CONVENTIONAL MILLING MACHINE HAAS Mill as per Dwg 41232-200-002 FA 687 JL 07/04/29 8		
5.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
		
Comment: INSPECT PARTS AS THEY COME OFF MACHINE JL 07/04/29 8		
6.0	QC8	SECOND CHECK
		
Comment: SECOND CHECK JL 07/04/30 8		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: Date: 01/05/14
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
01/04/29	4	1 part is scraped - prototype trial error - errors in pgm causing part not to be good	 aspm	- scrap + replace	J-L 01/04/29	 01/04/30	 aspm	 01/04/30

NOTE: Date & initial all entries

Date: Thursday, 4/12/2007 9:32:59 AM

User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE

Job Number: 31776

Part Number: 41232 200 002 001

Job Number:



Seq. #: Machine Or Operation:

Description :

7.0 OUTSIDE SERV.30

OUTSIDE SERVICES-MACH



Comment: Sub-Contracting PURCHASING

Issue P/O: 3680

CLO 7/05/02

(8)

Black Anodize as per Dwg 41232-200-005

Ensure Certificate of Conformity is attached

8.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure certificate of conformity is attached

INSPECT POWDER COAT/CHEMICAL CONVERSION

JUL 15/02 (8)

9.0 QC3



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

10.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

CJ 07/05/02 (8)

11.0 QC21

FINAL INSPECTION/W/O RELEASE



(8)

Comment: FINAL INSPECTION/W/O RELEASE

JUL 07/05/11

Job Completion



U SP.02/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

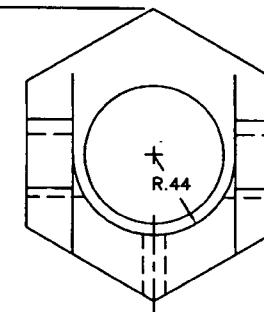
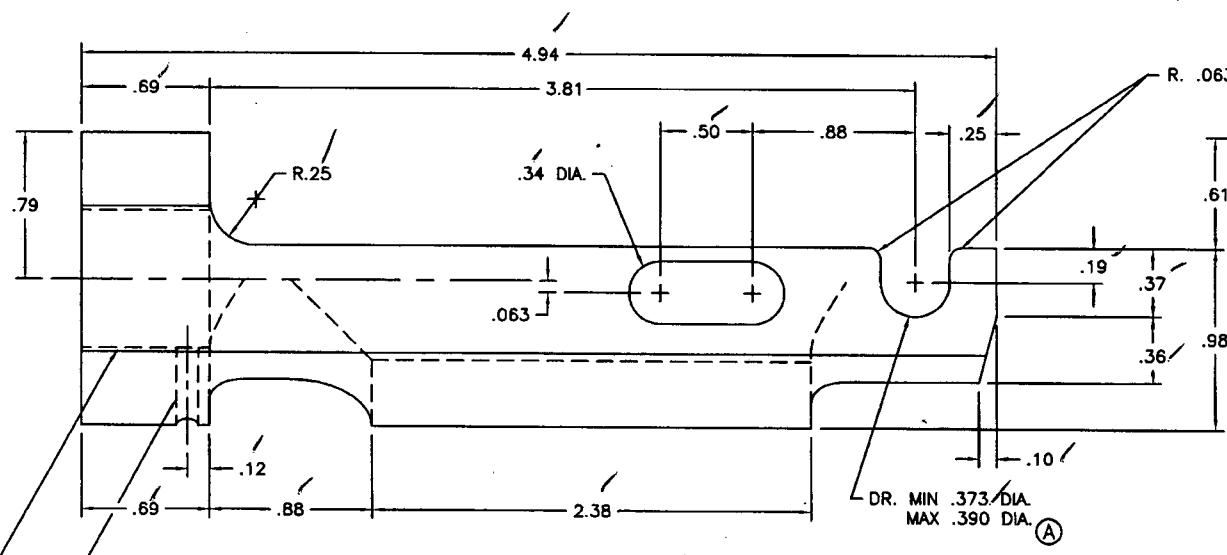
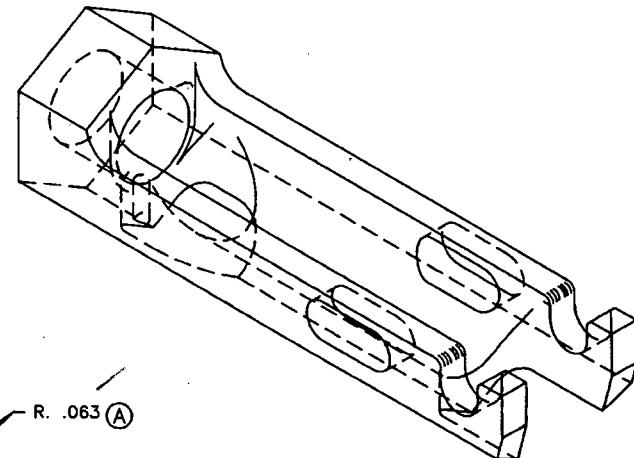
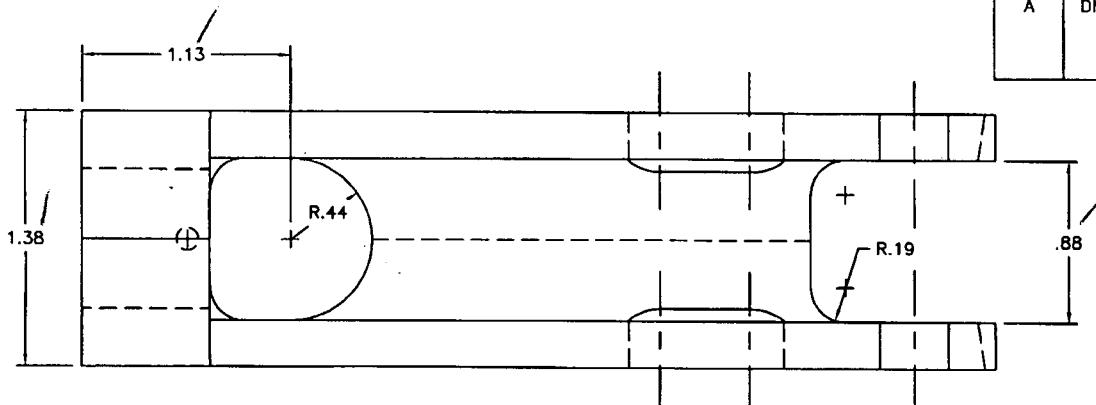
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

REVISION

LETTER	DRFTSMAN	DATE	DESCRIPTION	APPROVED	DATE
A	DNN	2/17/03	ADDED SMOOTH EDGES TO -001 & -003; REDUCED LENGTH OF -003 BY .125"; ADDED DRAIN HOLE TO -001; INCREASED DIA. OF AFT SLOT ON -001. MINOR CHANGE - FAR 21.95 CHECK D. MURPHY 2/17/03		



-001 TUBE

DR. .12 DIA. DRAIN HOLE
(NOTE: SPOTFACE IF REQ'D
TO DRILL HOLE) A

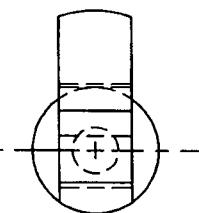
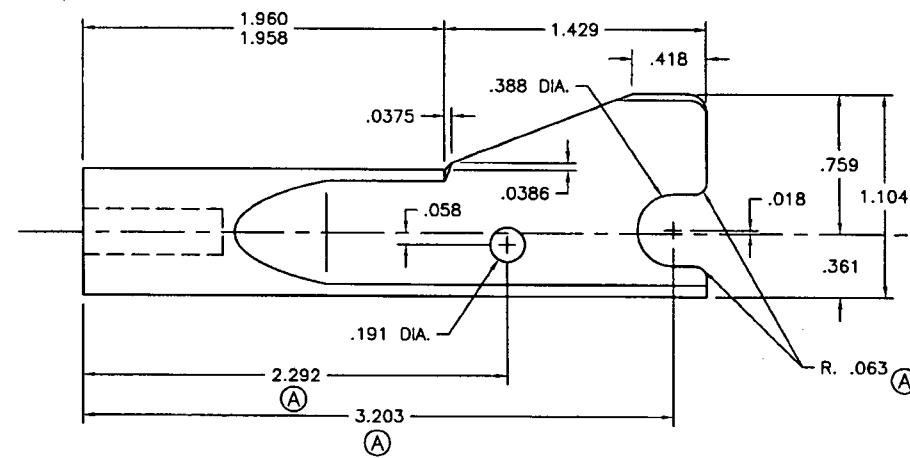
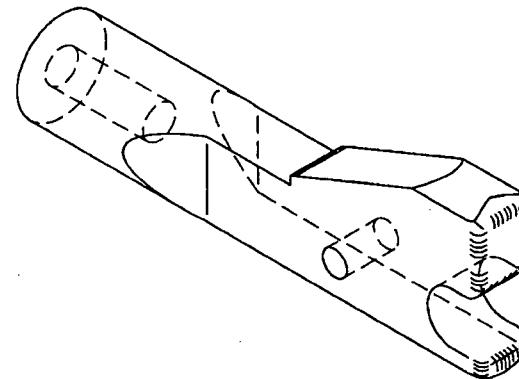
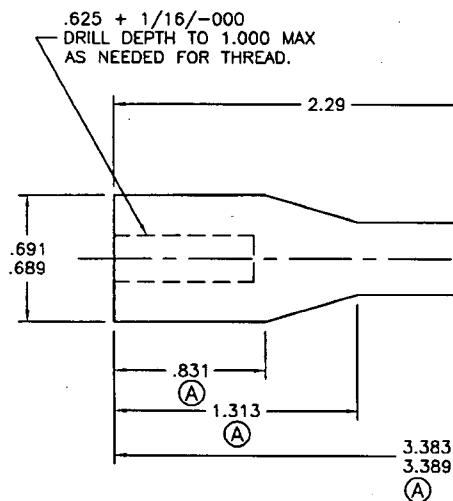
3/4"-20 THD.
NO. 31776
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
ENGINEERING
RETURN TO
SHOP COPY

ANODIZE IN ACCORDANCE WITH MIL-A-8625, TYPE III, CLASS 2
DYED BLACK.
NOTE: *TYPE II*

NO. REQ'D PER ASSY	1	MS21209F4-15	INSERT				
		-005	PIVOT ARM A	1.00 DIA. x 3.56	2024-T4, T351 ALUM.		
		-003	LATCH A	1.11 x 3.50	2024-T4, T351 ALUM.		
		-001	TUBE A	1.38 HEX STK. x 4.94	2024-T4, T351 ALUM.		
	-005	PART NO.	NAME	STOCK SIZE	MATERIAL	MATL. SPEC	ZONE

LIST OF MATERIAL

PROPRIETARY RIGHTS NOTICE	UNLESS OTHERWISE SPECIFIED	DRFTSMAN	D. NELSON	2/18/02	TITLE
THESE DATA ARE PROPRIETARY TO EM AVIATION, INC. DISCLOSURE, REPRO- DUCTION, OR USE OF THIS DATA FOR PURPOSES OTHER THAN THE ORIGINAL WORK FOR WHICH IT WAS PRODUCED IS PROHIB- ITED WITHOUT WRIT- TEN AUTHORIZATION FROM EM AVIATION, INC. THE INFORMATION DOES NOT EXCLUSIVELY RELATE TO VENDOR PARTS.	X±.1 XX±.03 XXX±.010 ANGLES ±.1/2	CHECK	D. MURPHY	2/18/02	STEP ACTUATOR COMPONENTS
003-002-001		STRESS			
		PROJ. ENGR.			DIA. SIZE C
		HEAT TREAT			SCALE 2:1
		FINISH A			
					DIA. NO. 41232-200-002 REV. A
					SHT 1 OF 3



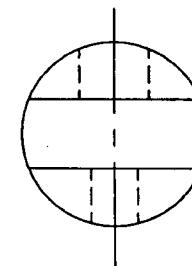
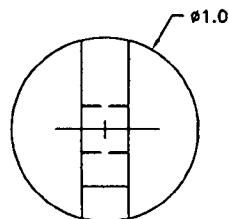
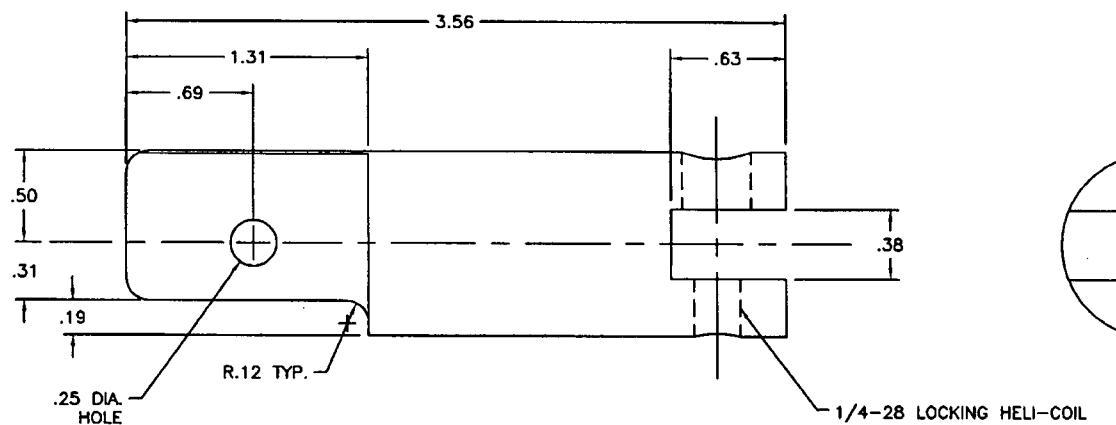
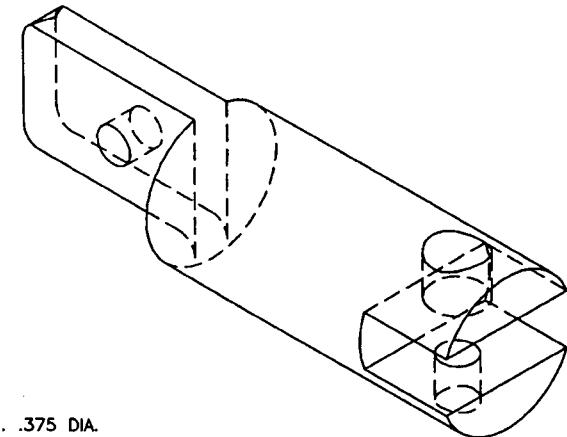
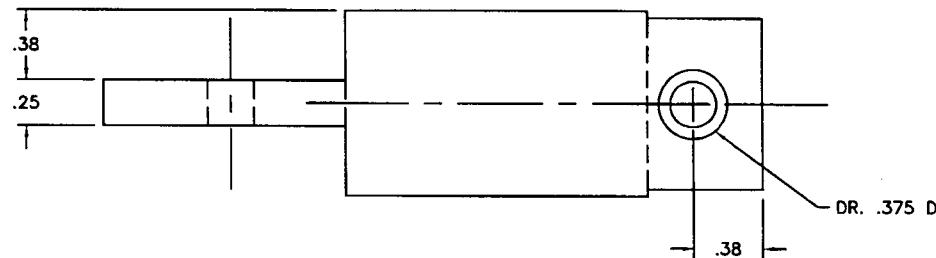
-003 LATCH

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WITHOUT NOTICE
WORK ORDER
NO. 3172

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WHICH IS PROPRIETARY TO VENDOR PARTS.
THE FOREGOING DOES NOT APPLY TO VENDOR PARTS.

Era Aviation, Inc.

TITLE		SIZE	DRAW. NO.	REV.
STEP ACTUATOR COMPONENTS	C	41232-200-002	SHT 2 OF 3	A



-005 PIVOT ARM

WORK ORDER
NO. 31776
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Era Aviation, Inc.

STEP ACTUATOR COMPONENTS

C

41232-200-002
SHT 3 OF 3

A

DATE
2/26/04

ENGINEERING ORDER

E.O. No.
B-1SHT.
1 OF 1BY
D. NELSON

APPROVED BY

TITLE

STEP ACTUATOR
COMPONENTS

DWG. AFFECTED

41232-200-002

SHEET AFFECTED

SHT 1 & 3

REASON FOR CHANGE: CHANGED DASH NO. OF INSERT ON L/M; CHANGED INSERT CALLOUT ON -005 PIVOT ARM.

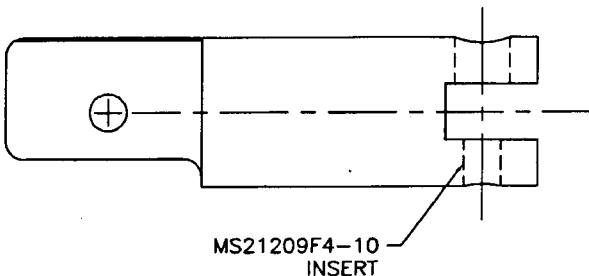
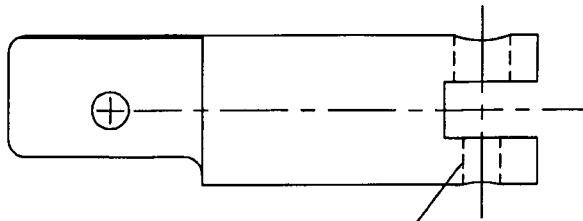
MINOR CHANGE - FAR 21.95

IS

1	MS21209F4-10	INSERT
---	--------------	--------

WAS

1	MS21209F4-15	INSERT
---	--------------	--------

IS-005 PIVOT ARMWAS-005 PIVOT ARM

CHANGE REQUIRED:

DATE:

BY: SHOP COPY

YES

NO

TRAVELER

RETURN TO

INSTALLATION INSTRUCTIONS

ENGINEERING

MAINTENANCE INSTRUCTIONS

UNCONTROLLED COPY

ILLUSTRATED PARTS

SUBJECT TO AMENDMENT

UNINCORPORATED DRAWING LIST

WITHOUT NOTICE

MASTER DRAWING LIST

WORK ORDER
NO. 31776

COMPUTER DATA BASE

DART AEROSPACE LTD	Work Order:	31776
Description: Lube	Part Number:	41232200002001
Inspection Dwg:	Rev: A	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.69	± 0.030	0.69	✓			
0.44 Radius	± 0.030	0.44	✓			
3/4-20 ϕ min	$\rightarrow 0.696$	$\rightarrow 0.697$	✓			
max $\rightarrow 0.707$						
4.94	± 0.030	4.94	✓			
1.38	$\pm .030$	1.375	✓			
1.13	"	1.130	✓			
.88	"	.880	✓			
.69	"	.695	✓			
1.25	"	.250	✓			
.34	"	.342	✓			
4.941	"	4.941	✓			
.12	"	.122	✓			
.88	"	.881	✓			
2.38	"	2.381	✓			
.375	$.373 \text{ min}$ $.390 \text{ max}$.376	✓			
.98	$\pm .030$.974	✓			
.36	"	.380	✓			
.37	"	.355	✓			
.19	"	.183	✓			
.61	"	.606	✓			
.063	$\pm .010$.063	✓			
.25	$\pm .030$.245	✓			
.50	"	.498	✓			

Measured by:	DSP/SJ	Audited by:	9nd	Prototype Approval:	
Date:	07/04/28	Date:	07/04/29	Date:	

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

DSP/SJ

TNM

ANODISATION et PEINTURE TNM INC.



21 chemin de l'Aviation, QC H9R 4Z2
Telephone: (514) 429-7777 Fax: (514) 429-5108
Certifié ISO 9001-2000 / ISO 9001-2000 certified
Certifié NADCAP / NADCAP certified

**FACTURE
INVOICE**

55027

04-May-2007

CLIENT/CUSTOMER:

DART AEROSPACE LTD.
1270 ABERDEEN STREET
HAWKESBURY , ONTARIO
K6A 1K7

PURCHASE ORDER/
NO. DE COMMANDE: PO00003680

CONDITIONS / TERMS:
NET 30 JOURS / NET 30 DAYS

ITEM NO. / COMMANDE ORDRE N°	EXPEDIE SHIPPED	PART NUMBER & DESCRIPTION	QTY	PRICE UNITAIRE UNIT PRICE	EXTENSION AMOUNT
1	26	VARIOUS	26	VARIOUS	\$0.00
		<i>LOT PRICE</i>			\$130.00
				<i>SUB TOTAL:</i>	\$130.00
				<i>TPS/GST:</i>	\$7.80
				<i>TVQ/PST:</i>	\$0.00
				<i>TOTAL AMOUNT DUE:</i>	<i>\$137.80</i>

BLACK ANODIZE PER MIL-A-8625F TYPE II CLASS 2 ALL OVER

No de TPS / GST # : 891559734 RT
No de TVO / OST # : 1019307154 TC

**CERTIFICAT DE CONFIRMIETE EMIS POUR CHAQUE PROCEDURE
CERTIFICATE OF COMPLIANCE ISSUED FOR EACH PROCESS**

En cas de perte ou de dommages dû à la valeur intrinséque de certaines responsabilité se limitera à deux fois la valeur du traitement des pièces perdues ou endommagées.

Due to the intrinsic value of some parts, we are only liable for loss or damage to twice the invoiced finishing costs.